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NOTICE OF ALLOWANCE AND ISSUE FEE DUE

LM41/0508

GERALD E LESTER 22107 FIELDER KATY TX 77450

. : APPLICATION NO.	FILING DATE	TOTAL CLAIMS.	E	XAMINER AND GROUP ART UNIT	DATE MAILED
08/707,338	09/03/96	036	VAIL, S	2775	95/98 / 98
First Named Hill.L., Applicant		JAUU	UES R.	JR.	• .

TITLE OF ELECTRONIC CONTROL SYSTEM FOR FLAT PANEL DISPLAYS

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE		SMALL ENTITY	FEE DUE	DATE DUE
2 ATC101	345-1	50.000	D87 UT	ILIT	Y YES	\$660.00	Ø8/10/98

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u>

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
 - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
 - B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give application number and batch number.

 Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY



Notice of Allowability

Application No. 08/707,338 Applicant(s)

Hill, Jr.

Examiner

Seth D. Vail

Group Art Unit 2775



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.							
This communication is responsive to <u>amendment filed Feb 20, 1998</u>							
X The allowed claim(s) is/are 1-36							
The drawings filed on 2-20-98 are acceptable.							
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).							
☐ All ☐Some* ☐None of the CERTIFIED copies of the priority documents have been							
☐ received.							
received in Application No. (Series Code/Serial Number)							
received in this national stage application from the International Bureau (PCT Rule 17.2(a)).							
*Certified copies not received:							
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).							
A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS ROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).							
☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.							
☐ Applicant MUST submit NEW FORMAL DRAWINGS							
because the originally filed drawings were declared by applicant to be informal.							
including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No.							
including changes required by the proposed drawing correction filed on, which has been approved by the examiner.							
including changes required by the attached Examiner's Amendment/Comment.							
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal lettter addressed to the Official Draftsperson.							
☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.							
Attachment(s)							
★ Notice of References Cited, PTO-892 ★ Notice Of References Cited Cite							
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).							
□ Notice of Draftsperson's Patent Drawing Review, PTO-948 STEVEN J. SARAS							
☐ Notice of Informal Patent Application, PTO-152 ☐ Interview Summary, PTO-413 ☐ ROUP 2700							
☐ Interview Summary, PTO-413 GROUP 2700 ☐ Examiner's Amendment/Comment							
☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material							
∑ Examiner's Statement of Reasons for Allowance							

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Attachment to Notice of Allowability, Paper No. 4

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

Allowable Subject Matter

- 1. Claims 1-36 are allowed.
- 2. The following is a statement of reasons for the indication of allowable subject matter:

The invention as claimed in each of applicant's independent claims 1, 2, 20, 21, 22, 23, 26, and 27, when considered as a whole, is not taught nor suggested by the prior art now made of record. Applicant claims an electronic control system for flat panel displays which automatically accommodates video signals of numerous types and formats, including VGA, SVGA, XGA, NTSC, PAL, SECAM, and all other forms of RGB video. The video signals may be interlaced, non-interlaced, or composite, or have separated horizontal and vertical synchronization signals. Color images are automatically reduced to grey scale monochrome when a monochrome flat panel display is used. A power saving feature provides for automatic power down when video reception is interrupted, and power up when the video reception is reacquired. Images are

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automatically, and under user control, upsized and downsized, and positioned and oriented to fit the flat panel display being used.

Applicant's disclosure cites Miller (U.S. Patent No. 5,442,371), Golston (U.S. Patent No. 5,327,240), and Kato (U.S. Patent No. 5,227,882) for disclosing electronic control systems for flat panel displays which can accommodate either interlaced or non-interlaced video signals, and which can separate horizontal and vertical synchronization signals from a video signal. Kato also refers to and claims a capability to automatically detect video formats and provide asynchronous video input and output, but, in fact, is incapable of asynchronous operation as the system for outputting video data is dependent on the input read rate.

Applicant's disclosure also cites Zenda (U.S. Patent No. 5,293,485), Furuya (U.S. Patent No. 5,193,069), and Inoue (U.S. Patent No. 4,922,237) for teaching electronic control systems for flat panel displays which accommodate color to color and color to monochrome processing of video signals. Zenda discloses a complex system which uses a color palette in supplying clolr signals to a computer CRT, but the sytem does not support NTSC, PAL, or HDTV video formats. Furuya provides a color to grey scale conversion, but fails to teach how the conversion is accomplished. Inoue discloses character conversion only, and cannot perform color to monochrome conversion for graphics.

Asprey (U.S. Patent No. 5,576,723) is notable for teaching a converter for converting color analog VGA video signals to analog monochrome gray scale video signals, however, the conversion process is only for VGA color signals.

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Asprey (U.S. Patent No. 5,299,306) is relevant for teaching an apparatus for simultaneously coupling computer video signals to a local color monitor and a distant monochrome monitor, with the color signals displayed on the monochrome monitor as a different shade of gray in accordance with a reduction factor of a voltage reduction means. However, this invention also provides conversion for only VGA color signals.

Kambayashi (U.S. Patent No. 4,841,289) provides an interface circuit for adapting a multiscan display monitor to receive color display data from various types of external sources, the interface circuit selecting only one of the various types of external sources.

Responses

3. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 305-9724 for informal or draft communications. NOTE: A Request for Continuation (Rule 60 or 62) cannot be faxed.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Inquiries

4. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Seth D. Vail, whose telephone number is (703) 305-4008. The examiner

can normally be reached on Monday through Thursday from 6:30 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Steve Saras, can be reached on (703) 305-9720.

Communications via Internet e-mail regarding this application, other than those under 35

U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be

addressed to [steve.saras@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO

employees do not engage in Internet communications where there exists a possibility that sensitive

information could be identified or exchanged unless the record includes a properly signed express

waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the

Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on

February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist, whose telephone number is (703) 305-3900.

SDV

April 26, 1998

STEVEN J. SARAS STEVEN J. SARAS STEVEN PATENT EXAMINER